Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 10/814,269

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (Original) A vehicular headlamp for emitting light with a predetermined light

distribution pattern, comprising:

a semiconductor light emitting element comprising a substantially linear light emitting

area for generating said light therefrom; and

an optical device for forming at least a part of a cut line to determine a boundary

between bright and dark with regard to said light distribution pattern by reflecting or

deflecting said light generated by said semiconductor light emitting element and projecting a

shape of said light emitting area.

2. (Original) A vehicular headlamp as claimed in claim 1, further comprising:

a plurality of said semiconductor light emitting elements being arranged in a row in a

direction corresponding to at least a part of said cut line,

wherein said optical device forms at least a part of said cut line by projecting said

shape of said light emitting area with regard to each of said plurality of semiconductor light

emitting elements towards positions arranged in a row over at least a part of said cut line.

3. (Currently Amended) A vehicular headlamp as claimed in claim 1, wherein:

2

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 10/814,269

said semiconductor light emitting element further comprises an active layer; and

said light emitting area has a groove for emitting said light from at lease least a part of

an opening of said groove, said groove substantially linearly extending on a surface of said

semiconductor light emitting element, the depth of said groove reaching at least a part of said

active layer.

4. (Currently Amended) A semiconductor light emitting element used for a vehicular

headlamp for emitting light with a predetermined light distribution pattern, comprising:

an active layer, and

a light emitting area having a groove for emitting said light from at lease least a part

of an opening of said groove, said groove extending on a surface of said semiconductor light

emitting element in a direction corresponding to at least a part of a cut line to determine a

boundary between bright and dark with regard to said light distribution pattern, the depth of

said groove reaching at least a part of said active layer.

5. (New) A vehicular headlamp as claimed in claim 1, wherein: the substantially

linear light emitting area comprises a rectangular upper surface of the semiconductor light

emitting element; and a first long edge of the rectangular upper surface defines a first length

of the cut line.

3

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 10/814,269

6. (New) A vehicular headlamp as claimed in claim 1, wherein the substantially linear light emitting area comprises a rectangular upper surface of the semiconductor light emitting element, the vehicular headlamp further comprising:

a first row of the semiconductor light emitting elements with rectangular upper surfaces, wherein first long edges of the rectangular upper surfaces of the first row of the semiconductor light emitting elements define a length of a first cut line; and

a second row, arranged at an angle to said first row, of the semiconductor light emitting elements with rectangular upper surfaces, wherein first long edges of the rectangular upper surfaces of the second row of the semiconductor light emitting elements define a length of a second cut line.

- 7. (New) A vehicular headlamp as claimed in claim 1, further comprising:
- a first row of the semiconductor light emitting elements; and
- a second row, arranged at a first angle to said first row, of the light emitting elements,

wherein said optical device forms a length of a first cut line by projecting the shapes of the light emitting areas of the first row of the semiconductor light emitting elements, and

wherein said optical device forms a length of a second cut line, arranged at a second angle to the first cut line, by projecting the shapes of the light emitting areas of the second row of the semiconductor light emitting elements

8. (New) A vehicular headlamp as claimed in claim 3, wherein: the substantially linearly extending groove comprises a thin rectangular shape on upper surface of the

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 10/814,269

semiconductor light emitting element; and a first long edge of the thin rectangular shape defines a first length of the cut line.

9 (New) A vehicular headlamp as claimed in claim 1, wherein the optical device comprises a lens.

10. (New) A vehicular headlamp as claimed in claim 1, wherein the optical device comprises a reflector.

11. (New) A semiconductor light emitting element used for a vehicular headlamp as claimed in claim 4, wherein: the groove comprises a thin rectangular shape on the surface of the semiconductor light emitting element; and a first long edge of the thin rectangular shape defines a first length of the cut line.

12. (New) A semiconductor light emitting element used for a vehicular headlamp as claimed in claim 4, wherein the groove comprises a thin rectangular shape on the surface of the semiconductor light emitting element; the vehicular headlamp further comprising:

a first row of the semiconductor light emitting elements with thin rectangular grooves, wherein first long edges of the thin rectangular grooves of the first row of the semiconductor light emitting elements define a length of a first cut line; and

a second row, arranged at an angle to said first row, of the semiconductor light emitting elements with thin rectangular grooves, wherein first long edges of the thin

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 10/814,269

rectangular grooves of the second row of the semiconductor light emitting elements define a length of a second cut line.

13. (New) A semiconductor light emitting element used for a vehicular headlamp as claimed in claim 4, wherein the vehicular headlamp comprises a lens for projecting the light emitted from the groove extending on a surface of said semiconductor light emitting element.

14. (New) A semiconductor light emitting element used for a vehicular headlamp as claimed in claim 4, wherein the vehicular headlamp comprises a reflector for projecting the light emitted from the groove extending on a surface of said semiconductor light emitting element.

15. (New) A vehicular headlamp, comprising:

a semiconductor light emitting element comprising an elongated light emitting area for emitting light in an elongated pattern;

an optical device for reflecting or deflecting the elongated pattern of emitted light; and for projecting the elongated pattern of emitted light to define a first length of a headlamp cut line, the first length of the headlamp cut line being formed by a first edge, in the elongated direction, of the elongated pattern of emitted light.

16. (New) A vehicular headlamp for emitting light with a predetermined light distribution pattern, comprising:

Amendment Under 37 C.F.R. § 1.111

U.S. Appln. No.: 10/814,269

a plurality of semiconductor light emitting elements, each comprising a substantially linear light emitting area for generating said light therefrom, and arranged so that their light emitting areas are arranged in an approximately straight line; and

an optical device for forming at least a part of a cut line to determine a boundary between bright and dark with regard to said light distribution pattern by reflecting or deflecting said light generated by said semiconductor light emitting element and projecting a shape of said light emitting area,

wherein the light emitting area emits a light through at least a part of an opening formed on a surface of said semiconductor light emitting element, said opening extending substantially linearly along said semiconductor light emitting element.

17. (New) A vehicular headlamp as claimed in claim 16, further comprising:

a plurality of said semiconductor light emitting elements being arranged in a row in a direction corresponding to at least a part of said cut line,

wherein said optical device forms at least a part of said cut line by projecting said shape of said light emitting area with regard to each of said plurality of semiconductor light emitting elements towards positions arranged in a row over at least a part of said cut line.

18. (New) A vehicular headlamp as claimed in claim 16, wherein:

said semiconductor light emitting element further comprises an active layer; and

said light emitting area has a groove for emitting said light from at least a part of an opening of said groove, said groove substantially linearly extending on a surface of said

Amendment Under 37 C.F.R. § 1.111 U.S. Appln. No.: 10/814,269

semiconductor light emitting element, the depth of said groove reaching at least a part of said active layer.